

creatively about the principles outlined in this section and how they might be applied to the operations in his/her own facility.

D. Source Reduction through Good Housekeeping Practices

The potential for simple, cost effective waste reduction found in good housekeeping practices is frequently overlooked. Standard facility practices such as chemical handling and production scheduling can have a profound impact on waste generation. Examples of housekeeping protocols potentially responsible for toxicity increases are presented in Figure 3. In most cases, simple corrective action can substantially reduce toxic loading of the effluent before treatment. Employee incentive programs, whether financial, award based, or both, can encourage a number of waste reduction ideas from almost every area of housekeeping.

D. 1. Production Scheduling. Over 80% of waste rinse water from paint manufacturers comes from equipment cleaning. The rinse water often consists of waste solvents and paint sludges containing metals. If production scheduling can be optimized so that runs progress from light to dark, the frequency of equipment cleaning can be greatly reduced. This "simple" scheduling change can result in lower water consumption, conservation of valuable paint materials, and reduced wastewater discharge (Lorton 1988). Textile dyeing and printing, and many types of ink printing can also benefit from scheduling optimization.

D. 2. Prescreening of Chemical Inventories. In 1975, Westpoint Pepperell established a toxic chemicals committee to review the existing input chemicals and to evaluate any chemical under consideration. The analysis was based on a wide range of criteria from health effects to environmental impact:

- hazardous waste characteristics
- biodegradability
- heavy metal content
- availability of safer alternatives